ABSTRACT

Chronic obstructive pulmonary disease is a common preventable and treatable disease. It not only presents with respiratory symptoms, but also with many extra pulmonary manifestations. Disturbances in serum electrolytes are one of a extra pulmonary manifestation .The objective of the study was to find out these serum electrolyte abnormalities in COPD patients.

METHODS

This was a prevalence study done among 100 COPD patients admitted in medical wards at MADRAS MEDICAL COLLEGE, CHENNAI.

RESULTS AND CONCLUSIONS

Minimum age of the subject was 35 yrs, and the maximum age was 70 yrs with Mean±SD:57.7800±7.48410.Majority of the patients were in 51-60 years age group, followed by 61-70 yrs age group. There were 78 male patients,22 female patients in the study. Among the patients studied,72 out of 100 patients were moderate COPD group,28 out of 100 were severe COPD group.

Among 100 patients studied 82 of them had hyperinflatted lung, 18 had normal findings on chest X ray. Among our patients, 35 had low serum sodium,14 had low serum potassium,9 patients had low serum calcium,2 patients had low serum phosphorous.

In this study, among 100 patients, lowest serum sodium level recorded was 123 Meq/L, highest serum sodium level recorded was 145 Meq/L.65 had normal sodium levels, 35 had low serum sodium levels (hyponatremia).

In this study of 100 patients, lowest potassium level recorded was 3.2 Meq/L, highest potassium level recorded was 4.8 Meq/L.14 out of 100 patients had low serum potassium(hypokalemia).

In this study population,91 out of 100 had normal serum calcium levels,9 out of 100 had low serum calcium levels, minimum serum calcium recorded was 8.3 mg/dl, maximum level recorded was 10 mg/dl.

In the study, 98 out of 100 patients had normal serum phosphorus level,2 had low serum phosphorus (hypophosphatemia).lowest serum phosphorus level recorded was 2.3 mg/dl,maximum level recorded was 4.2 mg/dl.

Keywords : COPD-chronic obstructive pulmonary disease. Hyponatremia, Hypokalemia, Hypocalcemia, Hypophosphatemia.